

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021032**Date Inspected:** 28-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhou Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG COMPONENT**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Subhasis Bera was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

In process Inspection

Trial Assembly

This QA Inspector observed the following work in progress:

SMAW in the 4G position for the OBG Segment 12BW to 12CW ,UT repair weld No. CA3012-010. The welder is identified as #040611. ZPMC QC is identified as Mr. Zhou Peng. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-REPAIR-FCM-1. The weld repair report is identified as CWR2823. The welding variables were recorded at, Amperage 137, volts 24.5.The In-process SMAW appears to be progressing in compliance with approved contract documents.

SMAW in the 1G position for the OBG Segment 12BW to 12CW ,UT repair weld No. OBW12A-003. The welder is identified as #067752. ZPMC QC is identified as Mr.Zhou Zhong Hai. The welding variables recorded by QC appear to comply with WPS-345-SMAW-1G(1F)-REPAIR-FCM-1.The weld repair report is identified as CWR2813R1. The welding variables were recorded at, Amperage 178, volts 23.8.The In-process SMAW appears to be progressing in compliance with approved contract documents.

SMAW in the 4G position for the OBG Segment 12BE to 12CE, UT repair weld No. OBE12C-001. The welder is

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identified as #067752. ZPMC QC is identified as Mr. Wang Li Yang. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-FCM-REPAIR-1. The weld repair report is identified as CWR2811 R1. The welding variables were recorded at, Amperage 137, volts 22.5. The In-process SMAW appears to be progressing in compliance with approved contract documents.

SMAW in the 4G position for the OBG Segment 12CW ,repair weld No. CA3012-010. The welder is identified as #046709. ZPMC QC is identified as Mr. Zhou Peng. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-REPAIR-FCM-1. The weld repair report is identified as WR19624. The welding variables were recorded at, Amperage 154, volts 25.5. The In-process SMAW appears to be progressing in compliance with approved contract documents.

CWR verifications (CWR2821R1)

Type – (D-scan)

This QA Inspector was notified via email for verification of B – CWR2821 R1 at 1430 hours the following was observed:

- The component for verification was identified as OBW12C-001 (12BW to 12CW Bottom panel field splice weld @ D6)
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- ZPMC QC Zhou Zhong Hai was present on site to direct and record all repair work.
- WPS to be used for repair were WPS-345-SMAW-1G(1F)-FCM-Repair-1, WPS-345-SMAW-4G(4F)-FCM-Repair-1

CWR verifications (CWR2805 R2)

Type – (D-scan)

This QA Inspector was notified via email for verification of B–CWR2805 R2 at 1430 hours the following was observed:

- The component for verification was identified as OBE12E-002 (12BE to 12CE Deck panel to Deck panel splice weld @E7)
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- ZPMC QC Zhou Zhong Hai was present on site to direct and record all repair work.
- WPS to be used for repair were WPS-345-SMAW-3G(3F)-FCM-Repair-1, WPS-345-SMAW-4G(4F)-FCM-Repair-1

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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ZPMC personnel performing SMAW for repair butt weld joint SEG3006-011 at 4G position on Bottom plate to Side plat at crossbeam side of segment 12CW at Trial Assembly area



ZPMC personnel performing SMAW for UT repair splice weld joint OBE12A-003 at 1G position on Deck plate of segment 12BE to 12CE at Trial Assembly area



The ABF QA inspector performed D-Scan Ultrasonic Testing for splice joint joining between side plate to side plate at crossbeam side on segment 12BW to 12CW at trial assembly area



Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Bera,Subhasis	Quality Assurance Inspector
Reviewed By:	Dsouza,Christopher	QA Reviewer
